AMENDMENTS TO THE CLAIMS

Please amend claims 1, 14, and 17-19, as indicated below.

1. (Currently amended) An image processing method comprising: (a) applying at least a first imaging technique and a second imaging technique to acquire a first, two-dimensional image of at least a first portion of teeth and a second three-dimensional virtual image of at least a second portion of the teeth, respectively, there being at least a partial overlap between said first and second portions; and (b) defining a set of basic anatomical landmarks in either one of the two images, locating said set in the other of the two images and registering said set in the two images.

2. (Original) A method according to claim 1, wherein said first image is a longitudinal cross-sectional image.

3. (Original) A method according to claim 2, wherein said first imaging technique is a radiographic x-ray technique.

4. (Original) A method according to claim 3, wherein said first image is cephalometric image.

5. (Original) A method according to any one of claims 14, wherein step (a) comprises applying a third imaging technique to acquire a third image comprising at least a profile of facial aspects.

6. (Original) A method according to any of claims 14, wherein said three-dimensional image comprises substantially all teeth of at least one jaw, and the two-dimensional image is positioned on the mid palatal plane of the three-dimensional image.

7. (Original) A method according to claim 1, comprising the following step: (c) displacing at least one tooth in at least one of the images in a manner resembling the manner in which said at least one tooth can be shifted in real-life orthodontic treatment; and (d) by applying a set of rules which define manner in which each element in one image maps to a corresponding element in the other image, displacing said at least one tooth in said other image

8. (Original) A method according to claim 7, wherein said set of rules comprise defining in said one image at least one object-associated landmark of said at least one tooth, locating said object-associated landmark, and displacing said

object-associated landmark in said other image, in proportion to its movement in said one image.

9. (Original) A method according to claim 8, wherein said basic landmarks are fixed, the displacement of the at least one object-associated landmark in said one image is defined according to said basic landmarks and said at least one object-associated landmark is then displaced in the same relative displacement in respect of the basic landmarks in said other image.

10. (Original) A method according to any one of claims 7-9, wherein said one image is a virtual three-dimensional image of a teeth model and said other image is a lateral image.

11. (Original) A method according to claim 10, wherein said lateral image is a cephalometric image.

12. (Original) A method according to claim 11, comprising the following step: (e) by applying a set of rules defining displacement of soft facial tissue caused by displacement of said at least one tooth, predicting effect of the displacement of said at least one tooth in said virtual three-dimensional image on soft

facial tissue image in said lateral image.

13. (Original) A method according to claim 12, wherein the displacement of said soft tissue is predicted using a third image of at least a profile of facial aspects.

14. (Currently amended) An image processing system comprising: (i) a first input utility for receipt of first data representative of a first two-dimensional cross-sectional image of at least a first teeth portion; (ii) a second input utility for receipt of second data representative of a second, tree-dimensional virtual image of teeth model of at least a second teeth portion; (iii) a module for defining basic landmarks in both images and for generating data representative thereof; and (iv) a processor associated with said first and said second input utility and with said module, for receiving said first and said second data and for mapping elements in one of the two images to the other of the two images according to the data representative of said basic landmarks.

15. (Original) A system according to claim 14, wherein said first image is a cephalometric image.

16. (Original) A system according to claim 15, comprising a third utility for receipt of third data representative of a third image comprising at least a profile of facial aspects.

17. (Currently amended) A system according to claim 14 ~~any one of claims 13-16~~, wherein the first, second and third utilities are integral.

18. (Currently amended) A system according to claim 14 ~~any one of claims 13-17~~, wherein said second utility comprises a data transferring module for transferring data representative of the second, virtual three-dimensional image to the processor.

19. (Currently amended) A system according to claim 14 ~~any one of claim 13-18~~, comprising a module defining a set of rules for displacing at least one virtual tooth representation in one of the images.

20. (Original) A system according to claim 19, wherein said set of rules define a displacement representing the manner of shifting of the at least one tooth in a real-life orthodontic treatment

21. (Original) A system according to claim 19, wherein said processor translates the displacement of said at least one virtual tooth representation in one of the images to displacement of a corresponding tooth in the other image.

22. (Original) A system according to claim 21, wherein said one of the images is a virtual three-dimensional image of teeth model, and the other image is a cephalometric image.

23. (Original) A system according to claim 22, comprising a module defining a set of rules for predicting the effect of displacement of teeth in the cephalometric image of soft facial tissue.